DEFENSE INFORMATION INFRASTRUCTURE (DII)

COMMON OPERATING ENVIRONMENT (COE)

**DII COE Version Description Document
for
DCE Cell Manager Segment v1.0.0.2 (Solaris 2.5.1)**
Version Description Document
9/30/97

Table of Contents

1. System Overview
The DCE Cell Manager is a tool used to administer DCE cells. It is a graphical interface used by cell managers to monitor and control DCE processes and applications. There are three different management tools available within Cell Manager. The first is the Security Manager. This tool is used to administer the security registry. From here the cell manager can add users and groups, change ACLs and control registry policies. The second tool is the Host Configuration Manager. This tool is used to control the various DCE hosts within the cell. From here, one can alter the makeup of the cell. The administrator can add hosts, alter their roles within the cell, promote a slave server to a master. The last tool is the Host Namespace Manager. This tool is used to monitor the host namespace of the DCE cell

2. Reference Documents
- *Transarc DCE Introduction*
- *Transarc DCE Command Reference*
- *Cell Manager 1.6 Overview and User's Guide*
- *Cell Manager 1.6 Security Manager User's Guide*
- *Cell Manager 1.6 Configuration Manager User's Guide*
- *Cell Manager 1.6 Namespace Manager User's Guide*

3. Version Description

3.1 Inventory of Materials
- Magnetic Media: Two 8mm tapes consisting of relative tar of the DCE Cell Manager Segment, Version 1.0.0.2/Solaris 2.5.1, September 30, 1997
- Version Description Document Defense Information Infrastructure (DII) Common Operating Environment (COE) DCE Cell Manager Segment, Version 1.0.0.2, September 30, 1997
- *Installation Instructions for the DCE Cell Manager Segment* v1.0.0.2, September 30, 1997

3.2 Software Changes

Namespace Manager:

- Ability to expand the DFS file system from the junction point in the CDS namespace. The user can use this functionality to easily modify ACLs for multiple DFS entries.

- Ability to examine the CDS namespaces of other cells. The cross-cell relationship between the cells must have already been initialized.

Configuration Manager:

- Ability to view a customized sub-set of hosts in the cell.

- If no customized view has been saved, the only hosts running Security,
  CDS, and DTS servers initially displayed.

Security Manager:

- Extended Registry Attribute (ERA) support.

- Ability to examine the security registries of other cells. The cross-cell
  relationship between the cells must have already been initialized.

- "Quick Load" option on the Display Options window. This option will only
  load the name of the principal in the main window. The end result can be
  a speed increase of 50x when loading large numbers of users (> 1000).

This submission responds to the following GSPRs:

  #D70938 Improper information conatined in the ReleaseNotes file
          The ReleaseNotes were re-written to exclude the information that was
          inapproriate

  #D70937 Requires Descriptor was found in the SegInfo.DII file instead of the SegInfo
          The Requires Descriptor was moved into the SegInfo file and SegInfo.DII
          was removed

       A error was found in the installation script, this error was corrected

4. Installation Instructions
Reference the *Installation Instructions for the DCE Cell Manager Segment* v1.0.0.2 for
instructions on installing DCE Cell Manager.

5. Known Problems and Errors
General:

- If you receive the following type of error message, contact Chisholm
  support:

     Message <number> not found in catalog.

- If you receive the following type of error message, consult your DCE
  documentation:

    DCE Error: <error message>

  If the previous message contains a hex error code, a DCE error message
  can be provided by executing the following command:

    > dcecp -c errtext <hex number>

- Make sure that your available ticket time is sufficiently ample to cover
  any time-consuming operations you might initiate during your application
  session. Time-consuming operations include deleting many security or
  CDS namespace objects and importing many principals and security groups.

- Depending on your system, closing the window in which you started the
  Cell Manager or issuing a Ctrl-C in the shell in which you've started the
  Cell Manager may cause the application to crash.

- Values dated beyond the year 2037 may become corrupted.

Configuration Manager:

- Do not set the Polling Interval in the Tool Options window to a value less
  than 5 (minutes).

- Polling of the DCE base daemons cannot occur unless the cellmgrd daemon
  is executing on the remote node. If polling frequently, memory creep
  may occur on the Agent daemons on the polled nodes.
  In small cells (less than 10 hosts polled), local polling of DCE daemons
  may be re-enabled. Contact Chisholm Support for further instructions.

- The status for an individual DCE daemon, most commonly dtsd, can
  potentially be overlooked if the agent does check the state of the daemon
  between the time when the daemon fails and when the RPC endpoint map is
  cleaned out by DCE.

- When configuring a host, enter the name of the host in the same format in
  which it will appear in the /.:/hosts directory. This format is generally
  the same as the value returned by the "uname -n" command when executed on
  the host to be configured.

- When creating a Local or Global NTP Time Provider, there is no
  confirmation that an NTP Time Provider is actually running on the

specified remote node.

- Do not use the tool to stop DCE on a host if it is running the only security server in the cell. If you do, you will have to restart DCE on that host using your machine vendor's native scripts. This problem does not occur of you have more than one security server in the cell.

- If while unconfiguring a host you receive a warning indicating that the host is running an additional CDS or Security server, take these steps:

  1) Cancel the unconfiguration process for the host.
  2) Remove the servers from the host individually using the Remove Additional Servers submenu.
  3) Unconfigure the host.

- You may need to manually clean out the /tmp and /opt/cellmgr/local directories. Certain operations may leave log files there.
  Note: Do not remove the /opt/cellmgr/local/dce_type or /opt/cellmgr/local/cellmgr_db file.

- Update Selected will not change the IP address under the circumstance where the NIS maps change. You must shut down the Configuration Manager and restart it to see the new IP address.

Security Manager:

- Importing a large number of users and groups can take a long time and can potentially exhaust system resources since this operation is memory intensive. Also, if your ticket expires during the import, the import operation will not be completed. We suggest that you refresh the ticket prior to importing a large number of users and groups.

- When using the Replica State window, if you receive an error indicating that the replica could not be contacted, click Update All to retrieve the updated information. This is most likely to appear when starting a replica, deleting a read-only replica, or restoring the master server.

- The File list in the Load and Save Template windows displays the entire pathname to the file instead of just the file name. It does not provide a scroll bar. The name of the template file will have to be entered by hand in the Selection field.

Agent:

- Occasionally monitor memory usage when running Cell Manager for extended

periods of time (one week) to ensure that memory creep does not
unexpectedly cause problems.

- The rate of memory consumption by the Agent increases with the rate
  DCE polling by the Configuration Manager.

6. Release Notes

General:

If you run Netscape or any other web browser, it is likely that Cell Manager
will not be able to allocate the colors it needs for display purposes. In
this case, you have the following options:

- Shut down the web browser, start the Cell Manager applications, then
  restart the web browser after all applications have started and are ready
  to begin administration functions.

- Specify that Cell Manager use a private color map. To specify a private
  color map, as root on the machine, go to the /opt/cellmgr/lib/C directory
  and edit the files CDSGraf, DCEHost, DCELogin, and DCEUser to change the
  line containing the string "privateColors" from "False" to "True".
  Restart the applications to initiate the change.
  NOTE: This may cause other applications on the screen to become distorted
       while the mouse pointer is in the Cell Manager windows. The
       operation of the other applications will not be effected.

System Requirements:

The following list identifies the required runtime libraries for both Station (GUI)
 software and the agent (cellmgrd) software.

Solaris DCE 1.1 shared libraries:

   Agent: -ldce -lthread -lucb -ldl -lintl -lresolv -lnsl
        -lw -lsocket -lelf

   Station: -ldce -lthread -lucb -ldl -lintl -lresolv -lelf
        -lXm -lXmu -lXt -lXext -lX11 -lsocket -lnsl
        -ldl -lw -lm -lc

7. Patch List

None

APPENDIX A

A.1 Installation Change
The installation software previously checked for processes running. The script would report that the process `config` was running and ask the installer if it should be stopped. Responding yes to this question would cause the installation script to terminate the X-window environment. This problem has been fixed by replacing the grep lines located in the **KillProc** and **CheckRunningProc** routines. Below are the changes.

```
KillProc()
PROC_IDS=`ps -ea | egrep -e"[  ]${PROC_NAME}" | grep -v grep | awk '{ print $1 }' `

CheckRunningProc()
`grep -c "${PROC}" $TMPFILE ` -gt 0
```

APPENDIX B
WAIVERS

Author: "Stuart Kurkowski" <kurkowsk@ncr.disa.mil> at SMTPLink-Logicon
Date: 8/5/97 10:18 AM
Priority: Normal
Receipt Requested
TO: Terry Smith at LOGICON.LC2
CC: smith5m@ncr.disa.mil at SMTPLINK-Logicon
CC: kurkowss@ncr.disa.mil at SMTPLINK-Logicon
CC: froedea@ncr.disa.mil at SMTPLINK-Logicon
CC: dorseyr@ncr.disa.mil at SMTPLINK-Logicon
CC: cameronc@ncr.disa.mil at SMTPLINK-Logicon
CC: hartleyd@ncr.disa.mil at SMTPLINK-Logicon
CC: goddardm@ncr.disa.mil at SMTPLINK-Logicon
CC: beaudoie@ncr.disa.mil at SMTPLINK-Logicon
CC: gormana@ncr.disa.mil at SMTPLINK-Logicon
Subject: DII COE Engr Office Waivers for DCE Cell Manager Segment
------------------------------- Message Contents -------------------------------
    ALCON,

  The DCEMgr segment is for the Solaris 2.5.1 OS. The following software and
    documentation waivers were issued during the CDR.

    1. Permission is granted for root access for the PostInstall process.

    2. Permission is granted for the applications to be assigned to the
    SysAdmin AcctGroup.

    3. Pulldown menus will be provided.

    4. The following DII COE documents will be delivered for the DCEMgr
    segment:
    Version Description Document (VDD)   NOTE: The VDD in the upcoming
    documentation requirements is being renamed the Software Version
    Description (SVD). All referenced to the VDD should be replaced with
    the SVD nomenclature thus this item is the:
    Software Version Description (SVD)
    Installation Procedures (IP)

    5. The following DII COE documents are waived for the DCEMgr segment
    delivery:
    Software Requirements Specification (SRS)
    Database Design Document (DDD)
    Operators Manual (OM)

Software Test Plan (STP)
Software Test Description (STD)
System Administrator's Manual (SAM), covered by commercial
 documentaion
Software User's Manual (SUM), covered by commercial documentation

6. No softcopies of commercial documentation are required to be
delivered.

The date and time of this e-mail should be used in the Delivery Letter
and in the Software Version Description (SVD) for quoting the waivers
issued by the DII COE Engineering Office.

V/r,
Capt. Stuart Kurkowski
DII COE Engineering Office